

ABSTRACT OF THE DISCLOSURE

In an ejector, a nozzle includes a nozzle tapered section having an inner passage with a radial dimension reduced toward a nozzle outlet port, and a needle having a needle tapered section disposed in the inner passage. The needle tapered section has a cross sectional area reduced toward a downstream end of the needle, and the downstream end of the needle is positioned at a downstream side with respect to the nozzle outlet port. In addition, the nozzle tapered section has a taper angle (ϕ_1) which is equal to or greater than a taper angle (ϕ_2) of the needle tapered section. Therefore, a boundary face on the outside of a nozzle jet flow becomes in a balanced natural shape, and is controlled in accordance with an operating condition. Thus, the ejector cycle can be operated while keeping high efficiency, regardless of the thermal load of the ejector cycle.